NEW PRODUCT NEWS

FEI Company Introduces the DualBeam XL860 Cleanroom-Compatible FIB/SEM Workstation for Rapid-Response Defect Characterization

FEI Company introduced the all-new DualBeam™ XL860 FIB/SEM Workstation, a completely cleanroom-compatible member of FEI's XL800 family of advanced defect review, analysis, and characterization tools. The new FEB/SEM workstation features robotic sample handling and active environment compensation, combined with extremely high resolution SEM imaging and rapid, precise FIB milling. It is specifically designed for process evaluation, yield management, and failure analysis, supporting design rules in 0.18 microns and beyond. The software automatically handles the complex interrelationships between SEM and FIB operation, allowing the operator to concentrate on analysis of the results

Reader Inquiry #40

Scanning Acoustic Microscopy for under $100K

Micro Photonics announces the ICAM Scanning Acoustic Microscope, a high-speed full digital and integrated system for rapid, non-destructive inspection of IC packages and similar parts for under $100,000. The ICAM system has been evaluated independently and found to have a substantially lower cost of ownership than competitive instruments. The microscope has the ability to image internal features of a sample showing the presence of manufacturing and processing defects. A unique feature of the ICAM is its high-speed drive that can achieve a reciprocating speed of 12 lines per second on a scan area of 25 x 25 mm. Because of the advanced mechanical and data acquisition design, the ICAM can inspect packages at very high speeds without excessive vibration while generating real time, high resolution images. A scan of 1" square with 250 x 250 pixel resolution takes 20 seconds to perform and images at lower resolution can be completed in even less time.

Circle Reader Inquiry #41

New AFM/STM for 50-500 K Operation

A new model has been added to the high performance Micro STM UHV Scanning Probe family, offering sample cooling with LHe for both STM and AFM operation using the exclusive OMICRON Needle Sensor technology.

The AFM Needle Sensor is an entirely electrical, integrated AFM sensor that does not require any optical or mechanical adjustment. Tip exchange capability using piezo motors has been adapted from the successful Variable SPM family of instruments.

This new microscope offers two-dimensional coarse positioning of the sample (6 x 10 mm²) with tip positioning in the third dimension (10 mm). Standard features include a large scan range (10 x 10 µm²), multi-stage Viton® vibration isolation, optical access to the sample, an in-vacuum I/V converter, and complete scanning tunneling spectroscopy and nanolithography capabilities using the universal SCALA control system.

Circle Reader Inquiry #42

TopoMetrix Introduces Pulsed Force Mode (PFM): An extension of the Atomic Force Microscope to allow measurements of surface properties.

TopoMetrix Corporation introduced a new imaging mode that extends the capabilities of the Atomic Force Microscope (AFM) beyond simply measuring topography. Pulsed Force Mode (PFM) allows the AFM to measure surface properties such as local stiffness and adhesion with the same high resolution obtained in topographic images. PFM avoids surface damage caused by imaging in contact mode on soft sample surfaces. PFM is sold exclusively by TopoMetrix.

Since its inception, PFM has been successfully applied to a variety of different samples. The PFM control unit allows the user to define a reference from which the adhesion and stiffness values are determined. The topographic image is collected simultaneously by the TopoMetrix system. The PFM-electronics extract the important features of a force-distance cycle. The result is an image of the adhesion, stiffness, and topography of a sample surface all obtained in one quick pass.

The PFM option is manufactured for TopoMetrix by WITec Gmbh in Germany. Additional information on PFM is available on the TopoMetrix web site at www.topometrix.com

Circle Reader Inquiry #43

USED EQUIPMENT WANTED

☎ Early electronic microscopes, such as RCA type EMU, EMC, EMT, Phillips Metalix, JEOL JEM-50, or other older types. Alan Weiner, WBCQ Radio, (207)538-9180

EMPLOYMENT OPPORTUNITIES

➲ **Post Doc Positions:** High resolution *in situ* microscopy. Corrosion, advanced battery, electrochemistry, polymer, materials science, biology-SPM. Several locations: U.S., Japan, Europe. http://www.molec.com/jobs/postdoc.html

USED EQUIPMENT FOR SALE

☎ **HITACHI 510 SEM** with backscatter and secondary detectors, 2 (two) PGT EDS systems with software available. All fully functional. (812)825-4617, 6-10 PM Eastern.

☎ **MILITARY RESEARCH LAB IS CLOSING** - Military contractor is selling at drastically reduced prices its Reichart Polycut S motorized sliding microtome, refrigerated and rotary microtomes, Sorvall ultramicotome, LKB knife cutter, Gatan Model 600 dual ion mill, stereo microscopes, Perkin Elmer microdensitometer, Joyce Loebl microdensitometer and LECO sulfur analyzer. For specification sheets, call: (202)544-0836.